MODIS Technical Team Meeting
Thursday, November 11, 2001
Building 33, Room E125
3:00 pm

Vince Salomonson chaired the meeting. Present were Steve Kempler, Ed Masuoka, Bill
Barnes, Chris Justice, Eric Vermote, Wayne Esaias, and Bruce Ramsay, with Rebecca
Lindsey taking the minutes.

1.0 Upcoming Events

•   MODIS Science Team Meeting, BWI Marriott   December 17-19, 2001

2.0 Meeting Minutes

Salomonson reported on the EOS IWG meeting. He reported that Steve Running had
expressed concern about difficulties getting 250-m data; he seemed to be unaware of the
MODIS Land Rapid Response system. Justice said we are still only doing 20 % of the
globe, and that is an issue. Salomonson also reported that there had been a special
SWAMP meeting discussing product quality definitions; they have drafted new ones that
are quite simplified. Jon Ranson still has to review them. There was feedback from Jack
Kaye that he interprets "provisional" quality data as "not scientifically useful."   Justice
said he felt that the MODIS products are as good as any heritage products. Justice pointed
out that AVHRR data has never been validated in the sense that it was compared
empirically to an independent set of ground measurements.

Salomonson showed a memo that he is drafting to the science team urging them to review
the product quality definitions to see if their products are ready to be considered
validated, and if not, when they would be. In light of the upcoming Data Products Review
at NASA HQ in early January, he has revised the agenda for the upcoming MODIS
Science Team Meeting. He would like a status report for every product, addressing the
various items that will be required at the HQ review. Presentations will be 20-30 minutes
each; the main thing is for people to say whether they are ready for validation.

Barnes said MCST is considering having their calibration meeting on Thursday, so that it
doesn't conflict with the discipline group breakout meetings on Monday. The purpose of
this is to review the L1B algorithm for members of the science team, and others; e.g.,
members of the Direct Broadcast community, who would like to hear it.   Esaias
suggested that perhaps Jack Xiong could send out whatever materials he had prepared
ahead of time, so that the team could respond with questions. Barnes will review the time
for the meeting to be held so that as many members of the Science Team can attend as
possible.

Salomonson then showed the draft agenda for the HQ data products review. He has
drafted it in a way that involves each of the discipline leaders presenting.   Out of the
details that HQ requested the team to provide, Salomonson has developed a suggested
presentation outline, that emphasizes how products evolved from beta to provisional, to
validated, and what is still necessary. Justice felt that we should really make sure that the

presentation ties into the 10 items that HQ wants addressed, making sure we have a wrap up that makes clear what the take-home message is.

Esaias indicated that the DAACs should be included as well because one reason why products aren't getting out to community is that there are problems with distribution, and that information needs to be available in the HQ review. Several other suggestions as to how to structure the presentation were provided. Salomonson said he would wait to see how HQ responds to his request for more time, and will take the group's suggestions into consideration.

Salomonson asked whether anyone was aware of a QA field or anything in the data products themselves that have to be set to "validated". Skip Reber asked the question. Robert Wolfe did not think so, but Salomonson asked Kempler to follow up with Wolfe. If no such field or flag exists, then we just need to update our web pages.

Kempler asked Justice whether he thought that everybody knows about the 250-m data who needs to know, i.e., is the word out there? Justice thought so, but felt that we really need to have user workshops and train them on how to order the data and use the tools. As far as getting the word out, Esaias said he would like to get together with Jim Acker and write some special releases to the ocean color group lists.

Kempler replied that they wrack their brains as to why the SeaWiFS group doesn't follow MODIS Ocean data. He still thinks a lot of it is how information about the products is packaged on the web site. He has been working with the web developers to illustrate how a naive user might react to the pages. Esaias suggested that DAAC user services staff should attend the AGU, and Kempler said they have looked into having an Internet hook up where people can get an online demo of how to order MODIS data.

2.2 Instrument
Salomonson said that there was a MSWG meeting on Tuesday, November 6. They discussed the issue of what precision is possible versus what is wanted. They decided that they are going to declare the L1b validated unless disciplines object. Esaias said that for it to be validated, MCST would have to assign uncertainties to the data set. Barnes said he thinks they can assign those uncertainties.

Salomonson reported that with respect to software distribution, we are close to posting the user agreement and making the code available, but some reviews are still pending.

Barnes reported that we lost about six hours of data day before yesterday (November 6) due to playback things being jammed.

2.3 Data Processing
Kempler reported that the DAAC is keeping up, and things just have to be coordinated with MODAPS so that they provide enough data for MODPAS to run efficiently, but not so much that MODPAS has to push data to archive. It causes a little inefficiency at the DAAC when they throttle back, but it has to be done. Salomonson asked about the report

he had heard at the PIP about the EDC DAAC not being able to ingest all the data we want to send. Masuoka commented that they are working on the issue, and it seems like it is going better.

Justice said the good news was that by the time we get to the Science Team Meeting production will be 10 –15 days behind real time at DAAC and MODAPS, and that even allows a one day a week loss. Salomonson said that it appears that the DAAC will be done with the complete year around December 25, and MODAPS sometime in mid-January. Kempler said that the DAAC is catching up with forward processing, and when that happens, MODAPS mtvs1 system will not be kept totally busy. Masuoka said that they have been discussing a direct pull out of the DAAC archive.

Masuoka reported that MODAPS is up to the 23rd of October by the end of the week, and they will soon be starting July 2001 on mtvs2. He also reported that they are going to start processing SAFARI data on mtvs1 in preparation for the upcoming AGU.

Kempler reported that they are continuing to work on data mining capabilities. He mentioned that it would be useful to acquire the routines that Andy Dessler (U. of MD) uses to mine the data when he receives large volumes. That way the DAAC could do that before hand, saving resources that would be used pushing out the larger volumes of data. Justice asked whether the procedure would negatively impact production and distribution. Kempler said it should help it.

Kempler said that they have been looking for users who need data mining; Vermote said he knew of many. Kempler wondered why the DAAC hadn't heard from these people. Masuoka commented that perhaps people look at what was promised out of the ECS system, and when that capability was taken out of the system, people just think nothing is possible. Kempler also added that the parameter-subsetting tool is now working.

Also, Kempler asked whether it was OK for the DAAC to stop production of 250 and 500m data collected in night mode, since it creates and empty file that uses up resources. The group agreed.

2.4 NOAA-NESDIS
Ramsay reported there are plans to install a dedicated 10 megabit/sec data communications line in November 2001 between NASA/GSFC Building 32 and NOAA/NESDIS Federal Building 4 in Suitland to link MODIS-NESDIS processing and MODIS. However, Bruce Webster, NOAA coordinator for the high-speed dark fiber installation, reported that the installation may not occur for 1 to 1.5 years. This could significantly limit the distribution of global MODIS data during this period. Masuoka asked if they weren't going to use Finks' science net to move that data. Ramsay said that several options are being pursued, but he didn't know which one represented the best opportunity for success. He also reported that the MODIS Land Rapid Response system is likely to be funded for prototype implementation in NOAA/NESDIS operations. Justice and Ramsay later discussed the issue off-line and agreed to move forward with the proposal.

2.5 Conclusion

Esaias reported on some of the comments he had heard from Jack Kaye at the IWG. He said that having provisional products in the archive is not the same as having validated products in the archive. Having validated products is what is important.

Also, Salomonson said that Kaye showed various metrics that he had not seen before. Diane Wickland is going to show us those metrics and the GPRA metrics, so that we will know what we are working toward. Many of those metrics had MODIS in them.

3.0 Action Items

3.1 Justice to contact Bob Whacker.
3.2 Ramsay to forward Justice an email from him.
3.3 Discipline leads to meet to resolve the issue of beta-release code and science-quality code, and what we need to say about it.
  Status: Open.
3.4 Technical team to discuss further the issue of predicted ephemeris data and how to improve it.
  Status: Open.